



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
<http://dnr.state.il.us>

Pat Quinn, Governor
Marc Miller, Director

September 23, 2010

Mr. Ben Mason, Senior Planner
Village of Algonquin
2200 Harnish Drive
Algonquin, IL 60102-5995

Mr. Todd Richards
SEC Group, Inc. – HR Green Company
420 N. Front Street
Suite 100
McHenry, IL 60050

Re: Huntley Fire Protection District Station No. 4 - Algonquin
Endangered Species Consultation Program
Project Number(s): 1007015
County: McHenry

Dear Mr. Mason and Mr. Richards:

The Department received a submission from SEC Group, Inc., via the Department's Ecological Compliance Assessment Tool (EcoCAT) website, on behalf of the Village of Algonquin, regarding this project in Section 25, Township 43 North, Range 7 East for consultation in accordance with the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075.

The project will be situated on a 1.75 acre parcel and involves the construction of a fire station, and associated parking lot and utilities to service the building. It is located just south of Algonquin Road, and north of/adjacent to the Manchester Lakes residential development.

The project is located south and southeast of **Exner Marsh Nature Preserve** and **Illinois Natural Area Inventory Site (INAI)**, and is within the vicinity of records for the State-listed threatened **Least Bittern**, *Ixobrychus exilis*, and the State-listed endangered **Black-crowned Night-Heron**, *Nycticorax nycticorax*; **Yellow-headed Blackbird**, *Xanthocephalus xanthocephalus*; **Common Moorhen**, *Gallinula chloropus*; and **Blanding's Turtle**, *Emydoidea blandingii*.

The Department has completed its review of the project and determined that the action may have an adverse impact on the State-listed threatened **Blanding's Turtle**, *Emydoidea blandingii*, and the listed bird species, since they inhabit areas very close to the parcel. To minimize potential impacts, the Department recommends the following measures be implemented by the developer and incorporated in the Village's project authorization.

Blanding's Turtles

Exner Marsh provides habitat for one of the largest populations of Blanding's Turtles in McHenry County. Since this species inhabits a variety of wetland and upland habitats, these turtles do attempt to travel south across Algonquin Road in search of upland nesting sites and occasionally make it across if not injured or killed by vehicles. It is documented that they travel south from Exner Marsh since most of the available land left in the vicinity, that is not developed is within the area of this proposed project.

1. The Department recommends that construction crews, and all on-site personnel, be educated and informed about Blanding's Turtles before work begins. Photos of both adult and juvenile Blanding's turtles should be distributed and the site management plan for responding to potential encounters should be discussed in a training session and at a preconstruction site meeting. Firefighters should also be educated about this species in the event any are encountered once the fire station is built.

Mowing regimes for a site such as this present an added risk of injury or death to turtles as they travel to and from wetlands during spring, summer, and fall. Anyone that will be mowing should also be educated about the species, be aware that they may be present between March – October, and be instructed on what to do if any Blanding's Turtles are encountered.

2. If a turtle is encountered on site, personnel should be instructed to immediately stop construction in the surrounding area and contact the McHenry Country Conservation District (815/678-4532) and the Department's Heritage Biologist (Brad Semel, 815/675-2386 x 317) keeping in mind it is a criminal act to handle a listed species. Personnel on site should watch the turtle until the proper authority arrives to alleviate the situation, keeping at a respectable distance. If the turtle moves, crews should mark the spot they first saw the turtle and the last spot it was seen.

If a Blanding's Turtle is encountered, Incidental Take Authorization from the Department's Office of Resource Conservation will most likely be recommended, which would result in a Conservation Management Plan for the species for this project.

3. The project area may contain an unknown nesting site or the route to a nesting site. Therefore, potential harm to transiting turtles is a concern. The Department recommends limiting construction to between October 31 and mid March, when this species is hibernating, to prevent construction activities from crushing or injuring juvenile or adult turtles.

4. If construction cannot be limited to the recommended time frame, exclusionary fencing should be installed and in place, from the beginning of March and remain until the end of October, to prevent turtles from entering the construction areas. Daily inspections of both sides of the fence should occur for the first two weeks and then be maintained weekly throughout the construction period to ensure the exclusionary fencing has been properly installed (dug into the ground) and to check if any turtles are present on either side of the fence.

5. The Department recommends that any trenches or excavations dug as a result of this project be covered at the end of each work day. Before starting each work day, trenches and excavations should be routinely inspected to ensure no turtles (or other animals) have become trapped within them.

6. Informational signs should be placed near the detention basin to educate/remind employees that Blanding's Turtles exist in the vicinity. At a minimum, sign should include color photos of an adult and juvenile, who to contact if one is encountered (IDNR and MCCD), biological information/life history, information that emphasizes this species is endangered, and that it is a criminal act to handle the turtle in any way.

7. The Department recommends basking logs and berms be placed within the naturalized, wet detention basin to accommodate turtles in their need to bask.

Listed Bird Species & Exner Marsh Nature Preserve

Commercial lighting tends to have a greater impact on natural resources from its fugitive light because its lights are usually larger, brighter, placed on higher standards, and may be left on during all hours of darkness. This can draw night-flying insects in and away from their normal locations (i.e., Exner Marsh Nature Preserve), impacting the food availability of nocturnal predators and degrading ecological conditions at the Nature Preserve. Fugitive light can also occur in the daytime from sunlight reflecting off glass, metal or other surfaces; the resulting glare can illuminate areas which normally are not, and can alarm wildlife if the glare is not stationary. Lightwave frequency has a major influence on whether insects are attracted to light sources; manufacturers should have data available on which type of lights minimize insect attraction. Low-pressure sodium-halide in the yellow/orange/pink spectrum is believed to have lower impacts.

The Department prefers a standard of no more than one horizontal foot-candle (lumen) at the natural area boundary for lateral lighting. The design of lamp fixtures has a major influence on this characteristic. While the Department is cognizant of the need to provide sufficient lighting to promote human safety and security, it is possible to do so using greater numbers of lights of lesser intensity at a lower elevation than fewer lights of higher intensity at a higher elevation.

The Department recommends that all forms of lighting for this project produce minimal lateral illumination by being directed downward vs. outward, and incorporate wave frequencies within the red-orange spectra (as opposed to blue-green spectra) so that insect attraction is minimized.

Consultation on the part of the Department is completed. **In accordance with 17 Ill. Adm. Code 1075.40(h), the Village of Algonquin must notify the Department of its decision regarding these recommendations, whether they will:**

- Allow the action to proceed as originally planned;
- Require the action to be modified per Department recommendations (please specify which measures if not all will be required); or
- Forgo the action.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resources review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected species are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this consultation review.

Cordially,

A handwritten signature in black ink that reads "Kathi Davis". The signature is written in a cursive, flowing style.

Kathi Davis
Division of Ecosystems and Environment
Impact Assessment Section
Office of Realty & Environmental Planning
217-785-5500

enclosure

cc: Mike Redmer, USFWS, Barrington Office
Brad Semel, IDNR/Region II/Natural Heritage
Ray Eisbrener, IDNR/Region II/Wildlife
Steve Byers, Illinois Nature Preserves Commission
Elizabeth Kessler, McHenry County Conservation District
Sue Hayden, McHenry County Conservation District
Dennis Sandquist, McHenry County Dept. of Planning & Development
Cindy Skrukrud, McHenry County Defenders/1075.70
Lisa Haderlein, The Land Conservancy of McHenry County/1075.70